



**EXHIBIT 1**

*Claims allowed in 275102080002*  
*09/713,512*

TECH CENTER 1600/2900

**Clean copy of pending claims pursuant to 37 CFR 1.121(c)(3)**

<sup>1</sup>36. (Amended) A polyamine derivative, or salt thereof, wherein said derivative has the formula  $R_1-X-R_2$ ,

wherein  $R_1-X-$  is of the formula  $R-NH-CR'R''-CO-$ ,

wherein  $-NH-CR'R''-CO-$  is a D- or L- form of valine, asparagine, or glutamine, or the D- form of lysine or arginine;

wherein  $R''$  is H,  $CH_3$ ,  $CH_2CH_3$ , or  $CHF_2$ ;

wherein R is H or a head group selected from the group consisting of a straight or branched  $C_{1-10}$  aliphatic, alicyclic, single or multiring aromatic, single or multiring aryl substituted aliphatic, aliphatic-substituted single or multiring aromatic, a single or multiring heterocyclic, a single or multiring heterocyclic-substituted aliphatic and an aliphatic-substituted aromatic; and

wherein  $R_2$  is a polyamine.

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<sup>2</sup>37. The derivative of claim <sup>1</sup>36 wherein R is H.

<sup>3</sup>38. The derivative of claim <sup>2</sup>37 wherein  $-NH-CR'R''-CO-$  is the D- form of lysine.

<sup>4</sup>39. The derivative of claim <sup>3</sup>38 wherein  $R_2$  is spermine.

<sup>5</sup>40. The derivative of claim <sup>4</sup>39 wherein  $R_1-X-$  is attached to spermine at the  $N_1$  position of spermine.

<sup>6</sup>41. A composition comprising a polyamine derivative or salt according to any one of claims <sup>1</sup>36-<sup>4</sup>39 and one or more pharmaceutically acceptable excipients.

<sup>7</sup>42. The composition of claim <sup>6</sup>41 further comprising a polyamine synthesis inhibitor.

<sup>8</sup>43. The composition of claim <sup>7</sup>42 wherein said inhibitor is difluoromethylornithine (DFMO).

<sup>9</sup>  
44. The composition of claim <sup>6</sup>41 wherein said one or more pharmaceutical excipients are suitable for treating a disease or condition in which the inhibition of polyamine transport is desirable.

<sup>10</sup>  
45. The composition of claim <sup>6</sup>41 further comprising one or more auxiliary agents or one or more liquid carriers.

<sup>11</sup>  
46. The composition of claim <sup>10</sup>45 comprising a preservative or a stabilizer or both as said auxiliary agent.

<sup>12</sup>  
47. The composition of claim <sup>11</sup>46 comprising a stabilizer as an auxiliary agent.

<sup>13</sup>  
48. The composition of claim <sup>10</sup>45 comprising peanut oil or olive oil as said liquid carrier.

<sup>14</sup>  
49. The composition of claim <sup>10</sup>45 further comprising water.

<sup>15</sup>  
50. The composition of claim <sup>6</sup>41 formulated as a solid.

<sup>16</sup>  
51. The composition of claim <sup>15</sup>50 formulated as a capsule, impregnated wafer, tablet or powder.

<sup>17</sup>  
52. A method comprising contacting a cell with a polyamine derivative or salt according to any one of claims <sup>14</sup>36-39.

<sup>18</sup>  
53. The method of claim <sup>17</sup>52 wherein polyamine transport in said cell is inhibited.

<sup>19</sup>  
54. The method of claim <sup>17</sup>52 wherein said cell is in a subject with a disease or condition associated with undesired cell proliferation.

<sup>20</sup>  
55. The method of claim <sup>19</sup>54 wherein said undesired cell proliferation is associated with proliferation of cells of the immune system, cells of the vascular neointima, tumor cells, or with undesired angiogenesis.

<sup>21</sup>  
56. The method of claim <sup>20</sup>55 wherein said disease or condition is cancer or post-angioplasty injury.

<sup>22</sup>  
57. The method of claim <sup>19</sup>54 wherein said contacting is administration of said polyamine derivative or salt to said subject systemically or topically.

<sup>23</sup>  
58. The method of claim <sup>19</sup>54 wherein said contacting is administration of said polyamine derivative or salt to said subject orally, parenterally, transdermally, intravaginally, intranasally, intrabronchially, intracranially, intraocularly, intraaurally, rectally, by infusion, or by injection.

<sup>24</sup>  
59. The method of claim <sup>23</sup>58 wherein said administration by injection is intravenous, subcutaneous, intramuscular, intracranial, or intraperitoneal.

<sup>25</sup>  
60. (Amended) A method comprising contacting a cell with a polyamine derivative or salt thereof, wherein said derivative has the formula  $R_1-X-R_2$ ,  
wherein  $R_1-X-$  is of the formula  $R-NH-CR'R''-CO-$ ,  
wherein  $-NH-CR'R''-CO-$  is the L- form of lysine or arginine;  
wherein  $R''$  is H,  $CH_3$ ,  $CH_2CH_3$ , or  $CHF_2$ ;  
wherein R is H or a head group selected from the group consisting of a straight or branched  $C_{1-10}$  aliphatic, alicyclic, single or multiring aromatic, single or multiring aryl substituted aliphatic, aliphatic-substituted single or multiring aromatic, a single or multiring heterocyclic, a single or multiring heterocyclic-substituted aliphatic and an aliphatic-substituted aromatic; and  $R_2$  is a polyamine  
under conditions such that polyamine transport in said cell is inhibited.

<sup>24</sup>  
61. The method of claim <sup>25</sup>60 wherein R' and R are H; R<sub>2</sub> is spermine; and R<sub>1</sub>-X- is attached to R<sub>2</sub> at the N<sub>1</sub> position of spermine.

<sup>B</sup>  
62. The method of claim 60 or 61 wherein polyamine transport in said cell is inhibited.

<sup>27</sup>  
<sup>25 26</sup>  
63. The method of claim 60 or 61 wherein said cell is in a subject with a disease or condition associated with undesired cell proliferation.

<sup>28</sup>  
<sup>27</sup>  
64. The method of claim 63 wherein said undesired cell proliferation is associated with proliferation of cells of the immune system, cells of the vascular neointima, tumor cells, or with undesired angiogenesis.

<sup>27</sup>  
<sup>28</sup>  
65. The method of claim 64 wherein said disease or condition is cancer or post-angioplasty injury.

<sup>26</sup>  
<sup>27</sup>  
66. The method of claim 63 wherein said contacting is administration of said polyamine derivative or salt to said subject systemically or topically.

<sup>31</sup>  
<sup>27</sup>  
67. The method of claim 63 wherein said contacting is administration of said polyamine derivative or salt to said subject orally, parenterally, transdermally, intravaginally, intranasally, intrabronchially, intracranially, intraocularly, intraaurally, rectally, by infusion, or by injection.

<sup>32</sup>  
<sup>31</sup>  
68. The method of claim 67 wherein said administration by injection is intravenous, subcutaneous, intramuscular, intracranial, or intraperitoneal.

<sup>33</sup>  
69. A method comprising contacting a cell with a polyamine derivative or salt according to any one of claims <sup>36 39</sup>36-39 and a polyamine synthesis inhibitor.

<sup>37</sup>  
<sup>27</sup>  
70. The method of claim 69 wherein said inhibitor is DFMO.

- <sup>35</sup>  
71. <sup>73</sup> The method of claim ~~69~~ wherein polyamine transport in said cell is inhibited.
- <sup>36</sup>  
72. <sup>73</sup> The method of claim ~~69~~ wherein said cell is in a subject with a disease or condition associated with undesired cell proliferation.
- <sup>37</sup>  
73. <sup>36</sup> The method of claim ~~72~~ wherein said undesired cell proliferation is associated with proliferation of cells of the immune system, cells of the vascular neointima, tumor cells, or with undesired angiogenesis.
- <sup>38</sup>  
74. <sup>37</sup> The method of claim ~~73~~ wherein said disease or condition is cancer or post-angioplasty injury.
- <sup>39</sup>  
75. <sup>36</sup> The method of claim ~~72~~ wherein said contacting is administration of said polyamine derivative or salt to said subject systemically or topically.
- <sup>40</sup>  
76. <sup>36</sup> The method of claim ~~72~~ wherein said contacting is administration of said polyamine derivative or salt to said subject orally, parenterally, transdermally, intravaginally, intranasally, intrabronchially, intracranially, intraocularly, intraaurally, rectally, by infusion, or by injection.
- <sup>41</sup>  
77. <sup>40</sup> The method of claim ~~76~~ wherein said administration by injection is intravenous, subcutaneous, intramuscular, intracranial, or intraperitoneal.
- <sup>42</sup>  
88. <sup>25 26</sup> The method of claim ~~80~~ or ~~81~~, wherein said contacting further comprises contacting said cell with a polyamine synthesis inhibitor.
- <sup>43</sup>  
89. <sup>42</sup> The method of claim ~~88~~, wherein said polyamine synthesis inhibitor is  $\alpha$ -difluoromethylornithine.

<sup>44</sup>  
90. The method of claim <sup>42</sup>~~88~~ wherein said cell is in a subject with a disease or condition associated with undesired cell proliferation.

<sup>45</sup>  
91. The method of claim <sup>43</sup>~~89~~ wherein said cell is in a subject with a disease or condition associated with undesired cell proliferation.

<sup>46</sup>  
92. The method of claim <sup>44</sup>~~90~~ wherein said undesired cell proliferation is associated with cancer.

<sup>47</sup>  
93. The method of claim <sup>45</sup>~~91~~ wherein said undesired cell proliferation is associated with cancer.

<sup>48</sup>  
94. The method of claim <sup>19</sup>~~54~~ wherein said undesired cell proliferation is associated with cancer.

<sup>49</sup>  
95. The method of claim <sup>27</sup>~~63~~ wherein said undesired cell proliferation is associated with cancer.